

SIGAL, A.M., prof. (Odessa)

Prolonged subfebrile temperature and its clinical significance.

Kaz. med. zhur. no.6:28-32 N-D '60.

(MIRA 13:12)

(BODY TEMPERATURE)

SIGAL, A.M., prof. (Odessa)

Once again about the physician's diagnostic thought and the problem of technic in the field of internal medicine (An answer to my opponents writing in Nos. 2 and 6, 1960 [Kazanskii meditsinskii zhurnal] apropos of my article, "Notes on medical thought and on the problem of technic in the field of internal ~~medicine~~"). Kaz. med. zhur. no.6:88-90 N-D '60. (MIRA 15:2)

(MEDICINE, INTERNAL)

SIGAL, A.M., prof. (Odessa)

Notes on medical thought and on the problem of technic in the  
field of internal medicine. Kaz.med.zhur. 41 no.1:8-16 Ja-F  
'60. (MIRA 13:6)

(MEDICINE, INTERNAL)

SIGAL, A.Ye., kandidat meditsinskikh nauk (Tashkent)

Use of albomycin in the treatment of pulmonary suppurations.

Klin.med., 33 no.11:24-28 N '55.

(MIRA 9:7)

1. Iz terapevticheskogo otdeleniya (sav.-kandidat meditsinskikh nauk A.Ye.Sigal) gorodskoy bol'nitsy No.11 Tashkenta (glavnyy vrach D.Kh.Azimov)

{~~antibiotiki~~, ~~antibiotiki~~},

~~antibiotiki~~

(ANTIBIOTICS, therapeutic use,  
lung suppurative dis.)

SIGAL, A.Ye.

Determination of carbonic anhydrase in the blood in chronic pulmonary diseases. Terap. arkh. 28 no.5:56-59 '56. (MLA 9:10)

1. Iz terapevticheskogo otdeleniya (zav. - kandidat meditsinskikh nauk A.Ye.Sigal) Ob'yedinennoy gorodskoy bol'nitsy No.11 (Tashkent)  
(HYDRASES,  
carbonic anhydrase in blood in lung dis. (Rus))  
(LUNG DISEASES, blood in,  
carbonic anhydrase (Rus))

SIGAL, A.Ye.

Treating chronic gastritis by gastric irrigation with Tashkent mineral water. Vop. kur., fizioter. i lech. fiz. kul't. 22 no.1:15-16 (MIRA 10:4)  
Ja-F '57

1. Iz terapevticheskogo otdeleniya (zav.-kandidat meditsinskikh nauk A.Ye. Sigal) Ob'yedinennoy gorodskoy bol'nitsy No. 11 g Tashkenta (glavnyy vrach D. Kh. Azimov)  
(STOMACH--DISEASES) (TASHKENT--MINERAL WATERS)

SIGAL, A.Ye., kand.med.nauk (Tashkent)

Late results and rehabilitation prognosis in pulmonary suppurations.  
Klin.med. 36 no.6:125-129 Je '58 (MIRA 11:7)

1. Iz terapevticheskogo otdeleniya (zav. - kand.med.nauk A.Ye. Sigal)  
Ob'yedinennoy gorod'skoy bol'nitsy No.11 Tashkenta (glavnyy vrach D.Kh.  
Azimov).

(LUNG DISEASES, ther.

suppurations, remote results & rehabil. progn. (Rus))

SIGAL, A.Ye., kand.med.nauk

Further observations on the treatment of chronic hypoacid gastritis  
by stomach irrigation with Tashkent mineral water. Trudy Uz. gos,  
nauch.-issl. inst. kur. i fizioter.no.15:121-128 '59.

(MIRA 14:9)

(STOMACH--INFLAMMATION)

(MINERAL WATERS)

SIGAL, A.Ye., kand.med.nauk; KOLOSKOVA, L.A., red.; AGZAMOV, K.,  
tekhn.red.

[Pulmonary suppurations; their clinical aspects, the outcomes  
of the disease, and work prognosis] Legochnye nagnoeniia;  
klinika, iskhody zabolevaniia i trudovoi prognoz. Tashkent,  
Gos.med.izd-vo M-va zdravookhraneniia UzSSR, 1960. 127 p.  
(MIRA 15:5)

(LUNGS—DISEASES) (DISABILITY EVALUATION)

SIGAL, A.Ye.

Influence of hydroaeroionization on the microflora of the air. Vop.  
kur. fizioter. i lech. fiz. kul't. 25 no. 3:235-238 My-Je '60.  
(MIRA 14:4)

1. Iz Uzbekskogo instituta kurortologii i fizioterapii imeni N.A.  
Semashko (dir. - dotsent Ya.K. Muminov).  
(AIR, IONIZED) (AIR—MICROBIOLOGY)

ACC NR: AP6033465

SOURCE CODE: UR/0413/66/000/018/0042/0043

INVENTOR: Gatsenko, L. G.; Sigal, B. M.; Nikiforova, T. A.; Shipova, S. N.; Munyakova, Z. N.; Petrova, M. F.

ORG: none

TITLE: Preparation of 1-methyl-4-dichlorocarbamylpiperazine salts.  
Class 12, No. 185926 [announced by "Akrikhin" Chemical and Pharmaceutical Plant (Khimiko-farmatsevticheskiy zavod "Akrikhin")]

SOURCE: Izobret prom obraz tov zn, no. 18, 1966, 42-43

TOPIC TAGS: ~~1-methyl-4-dichlorocarbamylpiperazine salt~~ *phosphoric acid, alcohol, organic salt*

ABSTRACT: To simplify the preparation of 1-methyl-4-diethylcarbamyl-  
piperazine salts by the reaction of ditrazine with acids (phosphoric or citric) and to increase the yield of the salts, the reaction is carried out in isopropyl alcohol. [W.A. 50]

SUB CODE: 07/ SUBM DATE: 22Jul65

Card 1/1

UDC: 615.45:547.861.3

SIGAL, B.S., prof. [deceased]

Problems of hygiene in Russian literary and political journals  
during the 1860-1890. Sov.zdrav. 18 no.7:30-35 '59.

(MIRA 12:9)

1. Iz kafedry organizatsii zdavookhraneniya i istorii meditsiny  
Leningradskogo sanitarno-gigiyenicheskogo meditsinskogo instituta.

(LITERATURE,

hyg. in Russian non-med. literature, hist.

(Rus))

(HYGIENE,

in non-med. Russian literature, hist. (Rus))

SIGAL, F.M.; SILAYEVA, V.A.

Primary actinomycosis of the stomach. Vest. rent. i rad. 35 no. 5:83-  
84 S-O '60. (MIRA 13:12)

1. Iz nauchno-poliklinicheskogo otdela (zav. - kandidat meditsinskikh nauk Ye.M. Kagan) i khirurgicheskogo otdela (zav. - doktor meditsinskikh nauk P.V. Skaldin) Gosudarstvennogo nauchno-issledovatel'skogo rentgeno-radiologicheskogo instituta Ministerstva zdavvokhraneniya RSFSR (dir. - prof. I.G. Lagunova).  
(ACTINOMYCOSIS) (STOMACH—DISEASES)

L 42122-66 DT(1)/1F(m)

SOURCE CODE: UR/0293/66/004/003/0351/0355  
31  
E

ACC NR: AP6019588

AUTHOR: Sigal, I. Kh.

ORG: none

TITLE: Inertial scheme for calculating flight orbits in the field of an attracting center

SOURCE: Kosmicheskiye issledovaniya, v. 4, no. 3, 1966, 351-355

TOPIC TAGS: orbit calculation, orbit flight path

ABSTRACT: A scheme is given for calculating the elements of a Keplerian orbit passing through two given points in space  $P_1(x_1, y_1, z_1)$  and  $P_2(x_2, y_2, z_2)$  in a fixed time of flight  $\Delta t = t_2 - t_1 > 0$ . The solution of the differential equations and the boundary conditions for the problem are equivalent according to Gauss to finding the ratio  $n$  of the area of the sector bounded by the radius vectors  $r_1$  and  $r_2$  and the arc of the orbit to the area of the triangle bounded by the same radius vectors and the chord joining the two points. For an elliptic orbit

$$\eta^3 - \eta^2 = \frac{2g - \sin 2g}{\sin^3 g} m,$$

$$\sin^2 \frac{g}{2} = \frac{m}{\eta^2} + \gamma.$$

UDC: 521.31:629.19

Card 1/3

L 42122-66

ACC NR: AP6019588

where

$$\gamma = \frac{1}{2} - \frac{r_1 - r_2}{4\sqrt{r_1 r_2} \cos f}, \quad m = \frac{(t_2 - t_1)^2}{(2\sqrt{r_1 r_2} \cos f)^2},$$

$2f = v_2 - v_1$  is the difference of the true anomalies of the initial and final points of the flight, and  $2g$  is the difference of the eccentric anomalies  $E_2 - E_1$  of the points  $P_1$  and  $P_2$ . The semimajor axis of the orbit is given by

$$a = \frac{(t_2 - t_1)^2}{(2\eta \sqrt{r_1 r_2} \cos f \sin g)^2}.$$

Corresponding expressions are also given for a hyperbolic orbit. The form of the required orbit depends on the condition

$$\begin{aligned} t_2 - t_1 &> \tau - \text{ellipse} \\ t_2 - t_1 &= \tau - \text{parabola} \\ t_2 - t_1 &< \tau - \text{hyperbola} \end{aligned}$$

where (in dimensionless space-time coordinates)

$$\tau = \frac{1}{6} [(\bar{r}_1 + \bar{r}_2 + \sigma)^{1/2} \mp (\bar{r}_1 + \bar{r}_2 - \sigma)^{1/2}],$$

$$\bar{r}_i = \sqrt{x_i^2 + y_i^2} \quad (i = 1, 2), \quad \sigma = \sqrt{\bar{r}_1^2 + \bar{r}_2^2 - 2\bar{r}_1 \bar{r}_2 \cos 2f}.$$

The upper or lower sign is taken if  $2f$  is respectively less than or greater than  $\pi$ . The solution of the Gaussian equation for the hyperbolic orbit is discussed in detail.

Card 2/3

SIGAL, I. M., Engr, Glavvagonprom

USSR/ Metals - Steel, Casting

Apr 52

"Railroad Car Hollow Axle Cast by Centrifugal Method," I. R. Dudnik, Engr,  
N. N. In'shakov, Cand Tech Sci, I. M. Sigal, Engr, Glavvagonprom

"Litey Proizvod" No 4, pp 2-6

Discusses progress in development of method for obtaining centrifugally cast axles since 1946. Carbon steel with 0.3-0.15%C and low-alloy steel with total 1.5 - 1.7% Cr and Ni were used for exptl castings. Latest castings entirely satisfy specification requirements, being superior to stamped axles in certain respects as, for example, higher impact strength at -20° and higher fatigue limit of notched specimens.

PA 213499

SIGAL, I.M., inzh., rukovoditel' laboratorii

Use of wood-fiber panels in railroad car construction. Zhel.dor.  
transp. 40 no.10:62-63 '58. (MIRA 11:12)

1. Laboratoriya novykh materialov Nauchno-issledovatel'skogo byuro  
vagonostroyeniya.

(Railroads--Cars--Construction)

L 40289-65 EWT(d)/EPA(s)-2/EWT(m)/EWA(d)/EWP(v)/T/EWP(t)/EWP(k)/EWP(h)/EWP(z)/  
EWP(b)/EWP(1)/EWA(c) Pf-4 MJM/JD/HH

ACCESSION NR: AP5002887

S/0135/65/000/001/0019/0022

3.0  
B

AUTHOR: Chuloshnikov, P. L. (Engineer); Sigal, I. M. (Engineer); Vardensky, V. B. (Engineer)

TITLE: Automatic regulation of roller welding of extended seams

SOURCE: Svarochnoye proizvodstvo, no 1, 1965, 19-22

TOPIC TAGS: welding, continuous welding, roller welding, welding control, controlled welding voltage, automatic welding, seam stability, steel welding/steel Kh18N9T

ABSTRACT: During roller welding of thin sheets of Kh18N9T steel, one can often achieve 200-250 m long continuous air-tight seams. The welding utilizes a continuous flow of 50 c/s current at a 4 m/min sample speed. The pauses between pulses are generated by thyratrons. Defective parts of such a seam cannot be repaired and, consequently, high stability of the process is of paramount importance. The authors established that the basic cause of nontightness is the change in appearance of the spherical shape of the rollers caused by wear. They also found that the maintenance of a constant voltage across the roller-to-roller interval results in a melted zone of very constant dimensions. Consequently, they developed automatic roller welding controls (electromechanical and electronic) which, by maintaining a constant voltage drop, compensate for the wear of the

Card 1/2

L 40289-65

ACCESSION NR: AP5002887

rollers. The article describes the circuits and their operation and shows the macro-structure of test welds. Orig. art. has 7 figures.

ASSOCIATION: None

SUBMITTED: 00

ENCL: 00

SUB CODE: MM, 1E

NO REF SOV: 003

CTHER: 001

*llc*  
Card 2/2

CHULOSHNIKOV, P.L., inzh.; SIZAL, I.M., inzh.; VERDENSKIY, V.B., inzh.

Automatic control of the roll welding of long seams. Svar. proizvod.  
no.1:19-22 Ja '65. (MIRA 18:3)

SIGAL, I.Kh. (Moskva); CHEBAKOV, V.A. (Moskva)

The matrix sorting method and its application to a problem in  
the theory of graphs. Zhur. vych. mat. i mat. fiz. 5 no.1:143-150  
Ja-F '65. (MIRA 18:4)

KOPYTOV, V.P., kandidat tekhnicheskikh nauk; SIGAL, I.Ya., inzhener.

~~XXXXXXXXXXXX~~  
Gas burner for room heater. Trudy Inst. isp.gaza AN URSS 1:  
40-43 '53. (Gas burners) (MLRA 9:6)

SIGAL, I., starshiy inzhener.

Fighting moisture in houses with gas-stove installations. Zhil.-kom. khoz.  
3 no.3:30 Mr '53. (MLRA 6:5)

1. Akademiya nauk USSR, Institut ispol'zovaniya gaza. (Dampness in buildings)

SIGAL, I.YA.

DZHUVAHO, V.P., kandidat tekhnicheskikh nauk; SIGAL, I.Ya., inzhener.

Experience in converting heating furnaces to gas in Kiev.

Gor.khoz.Mosk. 28 no.2:31-33 P '54.

(MLRA 7:5)

(Kiev--Gas--Heating and cooking) (Heating and cooking--Gas--Kiev)

SIGAL I.YA.

LEVIN, A.M., kandidat tekhnicheskikh nauk; SIGAL, I.Ya., inzhener.

Effect of furnace draft on the operation of gas injector blow pipes. Gor.khoz.Mosk. 28 no.9:25-27 S '54, (MLBA 7:10)  
(Burners) (Boilers)

SOV/124-57-3-2929  
Nr 3, p 42 (USSR)

Translation from: Referativnyy zhurnal. Mekhanika, 1957, Nr 3, p 42 (USSR)

AUTHORS: Kondak, M. A., Sigai, I. Ya.

TITLE: Investigation of Multi-jet Gas Burners Equipped With Combustion-stabilizing Nozzle Screens (Issledovaniye mnogosopel'nykh gazovykh gorelok s setchatoy ognevoy nasadkoy)

PERIODICAL: Izv. Kiyevsk. politekhn. in-ta, 1955, Nr 18, pp 293-309

ABSTRACT: The multi-jet gas burners equipped with combustion-stabilizing nozzle screens were designed for boiler and water-heater installations. The blasting air is injected into the furnace by means of a jet of combustible gas blown through the burner nozzles. A combustion-stabilizing screen consisting of 1.8-mm cells, which are sufficiently narrow to prevent any flashback, is installed over the nozzles for the purpose of stabilizing the flame. The tests performed revealed stable functioning of the burners without flashbacks or flame separation under gas pressures ranging from 5 to 3000 mm of water. It was determined that without any special cooling of the nozzles the most efficient operation took place within a gas-pressure range of 20-100 mm of water and with

Card 1/2

Car

SIGAL, I. Ya.

"Investigation of the operation of heating boilers and furnaces using natural gas." Acad Sci Ukrainian SSR. Inst of Heat Power Engineering. Kiev, 1956. (DISSERTATION For the Degree of Candidate in TECHNICAL SCIENCE.)

Knizhnaya letopis'  
No 33, 1956, Moscow

SIGAL, I. Ya. Cand Tech Sci -- (diss) "Study of the <sup>for the heating</sup> combustion of gas and heat exchange in ~~heating~~ installations of buildings." Minsk, 1958. 19 pp.  
100 copies (KL, 11-58, 118)

-82-

Slonim, I. Ya.

Heat exchange in small gas furnaces. Trudy Inst. isp. gaza  
AN URSR no. 6:55-70 '58. (MIRA 12:8)  
(Furnaces, Heating) (Gas as fuel)

SIGAL, I.Ya.

Improving the performance of heating stoves using natural gas.  
Trudy Inst.isp.gaza AN URSS no.6:71-90 '58. (MIRA 12:8)  
(Stoves, Gas) (Gas, Natural)

SOV/94-58-9-1/30

AUTHOR: Sigal, A.Ya. (Engineer)

TITLE: Gas burners installed in slits in the hearths of steam boilers.  
(Gazoburnyye polozheniya gazovykh gorelki dlya parovykh kotlov.)

PERIODICAL: Promyshlennaya Energetika, 1958, No.9, pp. 13-16. (USSR)

ABSTRACT: When boilers that burn fuel on grates are converted to burning gas it is necessary to install burners and pressure release valves. The total area of the pressure release valve must be  $0.2m^2$  for boilers up to 60 tons per hour of steam and  $0.3m^2$  for boilers of higher outputs. However, the pressure release valves are often made larger than this. The most difficult part of the conversion is usually the installation of the gas burners. Burners with air supply under pressure are most commonly used and they can conveniently be installed on the chain grate. In 1956-57 the Design Institute 'Ukrghiprokommunenergo' developed burners with a conical slit for installation on grates on converting boilers to gas firing. The construction of the burner is illustrated in Fig.1. and the method of installing the burners on an old chain grate is shown in Fig.2. The method of lining the furnace is described. The author made tests on slit type burners on this kind in the laboratories of the Gas Utilisation Institute of the Acad. Sci. Ukr. SSR and also on boilers in service. Test results on a boiler are given in Fig.3. using burners of the type shown in Fig.1. and burning natural gas. The excess air factor had to be at least 1.16 to ensure

Card 1/3

Gas burners installed in slits in the hearths of steam boilers. SOV/91-58-9-4/30

complete combustion. Tests made on 11 boilers in service fitted with slit type burners showed that in 38% of the cases combustion was incomplete, the heat losses were up to 10% and the average boiler efficiency was 88%. A special experimental rig was set up at the Gas Utilisation Institute in order to improve the design of these burners. Studies were made of the influence of the excess air factor, of the angle at which the gas and air flows meet and also of the configuration of the slit on the completeness of combustion, the flame height and other characteristics. The test rig is briefly described. The slit type burners illustrated diagrammatically in Fig.4. were recommended as a result of the work. Burners with straight sided slots are easier to make and have better characteristics than burners with conical slots. When the holes in the gas pipe were at an angle of  $90^{\circ}$  complete combustion could be assured with an excess air factor of 1.10. With the holes in the gas pipe at  $180^{\circ}$  the excess air factor was only 1.05, but in this case only cold air could be used. The method of arranging the burners on the grate is discussed and

Card 2/3

Gas burners installed in slits in the hearths of steam boilers. SOV/94-58-9-4/30  
arrangement diagrams are given in Figs. 5. & 6. It is  
recommended that slot type hearth burners with straight sided  
slots should be used when converting furnaces with outputs of  
1 - 35.tons per hour of steam. There are 6 figures and 1 literature  
reference (English)

1. Boilers--Equipment    2. Gas burners--Installation    3. Pressure  
reduction valves--Specifications

Card 3/3

SIGAL, I.Ya., inzh.

Slotted-bottom gas burners for boilers. Prom. energ. 13  
no.9:13-16 S '58. (MIRA 11:10)  
(Burners)

SIGAL, I.Ya.; MAYDENOV, G.F.

Designing turbulent jet gas burners for steam boilers. Gaz.  
pron. 4 no.6:24-30 Je '59. (MIRA 12:8)  
(Gas burners) (Boilers)

SIGAL, I.Ya.

Use of hearth burners in the conversion of boilers to natural  
gas. Gaz.prom. 4 no.10:26-29 0 '59. (MIRA 13:2)  
(Gas burners) (Boilers)

SIGAL, I.Ya.; AYZENBUD, M.A.

Conference (lectures) on the utilisation of gas in industry. Gaz.prom.  
5 no.8:50 Ag '60. (MIRA 13:10)

(Gas as fuel)

SIGAL, Isaak Yakovlevich; RAYBURD, L.L., red.; POSMETUKHIN, N.A.,  
tekhn. red.

[Gas burners for boiler systems] Gazogorelochnye ustroistva  
kotel'nykh ustanovok. Kiev, Gos. izd-vo tekhn. lit-ry USSR,  
1961. 160 p. (MIRA 14:9)  
(Gas burners) (Boilers)

SIGAL, I.Ya.; KAPLAN, M.A.; MAIKOVSKIY, A.V.

Use of jet and radiation-type hearth burners in heating boilers.

Gaz.prom. 6 no.2:19-23 '61.

(MIRA 14:4)

(Gas burners)

(Boilers)

NECHAYEV, Mikhail Aleksandrovich. Prinimal uchastiye MITROFANOV, I.A.,  
inzh.; ZUBAREV, S.A., retsenzent; LEVIN, A.M., retsenzent;  
SIGAL, I.Ya., retsenzeng; KOLYADA, I.A., retsenzent; STOLPNER,  
Ye.B., nauchnyy red.; MEDOTOVA, M.I., ved. red.; SAFRONOVA, I.M.,  
tekh. red.

[Safety measures in the transportation, distribution, and use  
of gas fuel] Tekhnika bezopasnosti pri transportirovke, ras-  
predelenii i ispol'zovanii gazovogo topliva. Izd.3., perer.  
i dop. Leningrad, Gostoptekhizdat, 1962. 299 p.

(MIRA 15:4)

(Gas as fuel—Safety measures)

KOPYTOV, V.F., doktor tekhn. nauk, otv. red.; VESELOV, V.V.,  
kand. khim. nauk, red.; YERINOV, A.Ye., kand. tekhn. nauk,  
red.; TISHCHENKO, A.T., kand. tekhn. nauk, red.; DASHEVSKIY,  
L.N., kand. tekhn. nauk, red.; CHEGLIKOV, A.T., kand. tekhn.  
nauk, red. SIGAL, I.Ye., kand. tekhn. nauk, red.;  
SEMENKOVSKAYA, P.T., kand. tekhn. nauk, red.; YEREMENKO, A.S.,  
kand. tekhn. nauk, red.; DYBAN, Ye.P., kand. tekhn. nauk, red.;  
FEDOROV, V.I., kand. tekhn. nauk, red.; POL'SKIY, N.I., kand.  
fiz.-mat. nauk, red.

[Transactions of the Second Heat Engineering Conference of  
Young Research Workers:] Trudy vtoroi teplotekhnicheskoi kon-  
ferentsii molodykh issledovatelei. Kiev, Izd-vo AN USSR, 1963.  
278 p. (MIRA 17:6)

1. Teplotekhnicheskaya konferentsiya molodykh issledovateley,  
2, 1963. 2. Chlen-korrespondent AN Ukr.SSR (for Kopytov).

ARONOV, Isaak Zinov'yevich, kand. tekhn. nauk; SIGAL, I.Ya., kand.  
tekhn. nauk, retsenzen

[Contact gas economizers] Kontaktnye gazovye ekonomizery.  
Kiev, Izd-vo "Tekhnika," 1964. 170 p. (MIRA 17:7)

... .. [unclear]; (100), etc.

Design of the ports of vector numbers with preliminary pre fixed.  
rel. prob. (100-15) (100). (MPS 10:12)

L 08566-67 EWT(1)/EWT(m) WW/JS

ACC NR: AP6033535

SOURCE CODE: UR/0170/66/011/004/0463/0466

AUTHOR: Sigal, I. Ya.; Lyubeznikov, D. A.

ORG: Gas Institute, AN UkrSSR, Kiev (Institut gaza AN UkrSSR) 79

TITLE: Study of the heat transfer of a gas flame at various degrees of premixing of the gas with air

SOURCE: Inzhenerno-fizicheskiy zhurnal, v. 11, no. 4, 1966, 463-466

TOPIC TAGS: combustion, combustion chamber, air fuel combustion, radiative heat transfer, convective heat transfer, flame

ABSTRACT: A study was made of the heat transfer from a natural gas-air flame to the wall of the combustion chamber at different amounts of primary air injection. The test assembly consisted of a combustion chamber in the form of a calorimeter (51 mm in diameter and 550 mm long) which had five water-cooled jacket sections. The premixing burner had a conical insert with 120 openings to ensure stable combustion. Secondary air was injected directly into the combustion chamber. The results are shown in Figure 1. It was shown that at low temperature conditions (1200—1600K) in water cooled combustion chambers, the overall heat transfer of a nonluminous flame with full premixing can be 20% higher than that of a luminous flame with incomplete premixing. In

Card 1/2

UDC: 536.3

L 08566-67

ACC NR: AP6033535

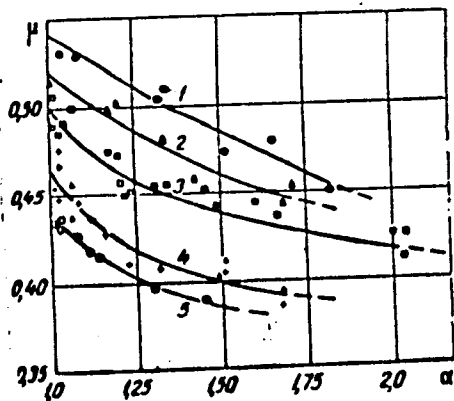


Fig. 1. Dependence of the overall heat transfer coefficient in the combustion chamber on the degree of premixing of the gas with air and the overall air excess coefficient ( $a$ )

1 -  $a_p = 1$ ; 2 - 0.8; 3 - 0.6; 4 - 0.4; 5 - 0.2.

chambers operating at higher temperatures, the difference in heat transfer between luminous and nonluminous flames becomes less pronounced. [WA No. 68]  
Orig. art. has: 3 figures and 1 table.

SUB CODE: 21/ SUBM DATE: 09Mar66/ ORIG REF: 004/ OTH REF: 001

Card 2/2

SIGAL, I.Z.

Model of pleural aspirator. Eksper. khir. i anest. 7  
no.5:59-60 S-O '62. (MIRA 17:10)

1. Iz kafedry tuberkuleza (zav.- prof. B.L. Mazur) Kazanskogo  
meditsinskogo instituta i protivotuberkuleznogo dispansera  
(glavnyy vrach Z.M. Kituyeva) Tatarskoy ASSR.

111, 1. 1.

Endoscope and Endoscopy

Measurement of the size of pleural lesions in thoracoscopy. Probl. tub., No. 4, 1952

9. Monthly List of Russian Accessions, Library of Congress, December 1952, Uncl.

2

SIGAL, I.Z.

Subdiaphragmatic pneumatic belt. Probl.tub. no.6:31-35 M-D '53.

(MLRA 6:12)

1. Iz kafedry tuberkuleza (saveduyushchiy - professor B.Ya.Sadogurskiy)  
Kazanskogo gosudarstvennogo instituta dlya usovershenstvovaniya vrachev  
im. V.I.Lenina i khirurgicheskogo otdeleniya (saveduyushchiy I.Z.Sigal,  
konsul'tant professor Yu.A.Ratner) protivotuberkuleznogo dispansera Tatar-  
skoy ASSR (glavnyy vrach - saslushennyy vrach Tatarskoy ASSR Z.M.Kutuyeva).  
(Chest--Exploration) (Medical instruments and apparatus)

SIGAL, I.Z.

Model of a hemostatic clamp. Khirurgia 35 no.10:136-137 O '59.  
(MIRA 12:12)

1. Iz Kazanskogo meditsinskogo instituta.  
(BLOOD VESSELS surgery)  
(SURGERY, OPERATIVE equipment & supplies)

SIGAL, I.Z.

Subphrenic plombage in extrapleural pneumonolysis above ineffective intrapleural pneumothorax. Probl.tub. 37 no.5:104-105 '59.  
(MIRA 12:10)

1. Kurs tuberkuleza (sav. - prof.B.L.Mazur) Kazanskogo meditsinskogo instituta (dir. - dotsent R.A.Vyaselev) i iz protivotuberkuleznogo dispansera Tatarskoy ASSR (glavnyy vrach Z.M. Kutuyeva).

(COLLAPSE THERAPY)

CHIGARIN, A., kand.med.nauk; SOLOLOV, N.V., prof.; SIGAL, I.Z.

New drugs. Kaz.med.zhur. 40 no.1:102-103 Jan '59.  
(MIRA 12:10)

(DRUGS)

KUTUYEVA, Z.M.; SIGAL, I.Z. (Kazan')

Second conference of phthisiologists of the Tatar A.S.S.R. ~~Lat~~.med.  
zhur. 40 no.4:104-106 Jul-Aug '59. (MIRA 13:2)  
(TATAR: A.S.S.R.--TUBERCULOSIS)

SIGAL, I.Z.; IZMAYLOV, A.I.

Tomographic and anatomical parallels in pulmonary tuberculosis.  
Kaz.med.zhur. 40 no.5:22-25 S-O '59. (MIRA 13:7)

1. Kurs tuberkuleza (zav. - prof. B.L. Masur) Kazanskogo meditsinskogo instituta na baze protivotuberkuleznogo dispansera Tatarskoy ASSR, i kafedra rentgenologii i radiologii No.1 (zav. - prof. M.Kh. Fayzullin) Kazanskogo Gosudarstvennogo instituta dlya usovershenstvovaniya vrachey im. V.I. Lenina.  
(LUNGS--RADIOGRAPHY) (TUBERCULOSIS)

SIGAL, I.Z.

Ligation of the vessels of the radix pulmonis in the pericardiac cavity in pneumonectomy. Kas.med.shur. 40 no.6:69-71 M-D '59.

(MIRA 13:5)

1. Kurs tuberkuleza (sav. - prof. B.L. Mazur) Kazanskogo meditsinskogo instituta i protivotuberkuleznyy dispanser Tatarskoy ASSR (glavvrach - Z.M. Kutuyeva), konsul'tant - prof. Yu.A. Ratner.

(LUNGS--SURGERY)

(PERICARDIUM)

SIGAL, I. Z.

Cand Med Sci - (diss) "Experience in thoracocautery and thoracoscopy in patients with tuberculosis of the lungs. Suggestions for the pre-operative preparation and techniques of the operation." Kazan', 1961. 13 pp; (Ministry of Public Health RSFSR, Izhevskiy State Med Inst); 100 copies; price not given; (KL, 7-61 sun, 262)

SIGAL, I.Z.

Cases of thoracoscopy and thoracocautery in pulmonary tuberculosis. Kaz.med. zhur. no.1:29-33 Ja-F'61 (MIRA 16:11)

1. Kurs tuberkuleza (zat.-prof. B.L. Mazur) Kazanskogo meditsinskogo instituta na baze protivotuberkuleznogo dispansera Tatarskoy ASSR (glavvrach - Z.M. Kutuyeva, konsul'tant -prof. Yu.A.Ratner).

\*

SIGAL, I.Z. (Kazan')

Use of abdominal pressure cushion during cautery of adhesions.  
Klin.med. no.12:44-50 '61. (MIRA 15:9)

1. Kurs tuberkuleza (zav. - prof. B.L. Mazur) Kazanskogo meditsinskogo instituta (dir. - dotsent R.A. Vyaselev) na baze protivotuberkuleznogo dispansera (glavnyy vrach Z.M. Kutuyeva) Tatarskoy ASSR (konsul'tant - chlen-korrespondent AMN SSSR prof. L.K. Bogush).

(CAUTERY) (ADHESIONS (ANATOMY))  
(SURGICAL INSTRUMENTS AND APPARATUS)

SIGAL, I.Z.

Pleurectomy in tuberculous pleural empyema of 25 years' duration. Kaz.med.zhur. no.2:73-74 Mr-Apr'63 (MIRA 16:11)

1. Kurs tuberkuleza (zav. - prof. B.L.Mazur) Kazanskogo meditsinskogo instituta na baze protivotuberkuleznogo dispansera Tatarskoy ASSR (glavnyy vrach - Z.M.Kutuyeva, konsul'tant prof. Yu.A.Ratner).

\*

SIGAL, I.Z.

Changes in intrapleural pressure after abdominal balloon dressing. Kaz. med. zhur. 4:21-23 J1-Ag'63 (MIRA 17:2)

1. Kurs tuberkuleza (zav. - prof. B.L.Mazur) Kazanskogo meditsinskogo instituta na baze protivotuberkuleznogo dispansera Tatarskoy ASSR (glavnyy vrach - Z.M. Kutuyeva, konsul'tant prof. Yu.A.Ratner; konsul'tant raboty - chlen-korrespondent AMN SSSR, prof. L.K.Bogush).

1. SIGAL, L. A.
2. USSR (600)
4. Tobacco
7. Agricultural artel with high yields of good quality tobacco. Tabak 13 no. 6, 1952.
9. Monthly List of Russian Accessions, Library of Congress, March 1953. Unclassified.

1953, . . .

Tobacco

"Cultivation practices for cigar tobaccos." M.F. Tarakanov and others. Reviewed by  
L.A. Sigal. *Tabak* 14, No. 1, 1953.

Monthly List of Russian Accessions, Library of Congress  
June 1953. 1953.

SIGAL, L.A.

Using electric well logs for studying the tectonics of the  
West Siberian Plain. Sov.geol. 2 no.3:114-125 M. '59.  
(MIRA 12:6)

1. Sibirskiy geofizicheskiy trest.  
(West Siberian Plain--Geology, Structural)  
(Prospecting--Geophysical methods)

SIGAL, L.A.: Prinimali uchastiye: ZUBRITSKAYA, T.P.; KNYSHEVA, G.I.;  
SOKOL'SKAYA, I.N.; TISLENKO, O.A.; GREKOVA, V.I.; KRYUCHKOVA, L.A.

Analyzing the method of isolating permeable horizons in a cross section  
of wells drilled in the central and southern parts of the West Siberian  
Plain and determining the nature of their saturation. Trudy  
SNIIGGIMS no.18:5-45 '61. (MIRA 16:7)  
(West Siberian Plain--Oil well logging)

SIGAL, Lev Al'bertovich[Sihal, L.A.]; CHERNOV, M.P., red.;  
CHEREVATSKIY, S.A.[Cherevats'kyi, S.A.], tekhn. red.

[Tobaccos of the Ukraine] Tiutiuny Ukrainy. Kyiv, Derzhsil'-  
hospvidav, URSR, 1962. 146 p. (MIRA 15:7)  
(Ukraine—Tobacco)

SIGAL, L.A.

Separation in a cross section of wells of permeable horizons  
and estimation of their saturation characteristics. Geofiz.  
razved. no.9:108-118 '62. (MIRA 15:9)  
(West Siberian Plain—Oil well logging)

SIGAL, L.A.

Laterlog-S-2-L<sub>n</sub>/L<sub>c</sub> charts. Razved. i prom. geofiz. no. 45:105-108  
'62. (MIRA 15:11)  
(Logging (Geology))

BRYLKIN, Yu.L.; SIGAL, L.A.

Combined geophysical investigations in the West Siberian Plain.  
Geol. nefti i gaza 7 no. 1:38-42 W '63. (MIRA 17:8)

1. Novosibirskiy geofizicheskiy trest i Sibirskiy nauchno-  
issledovatel'skiy institut geologii, geofiziki i mineral'nogo  
syr'ya.

SIGAL, L. A.

Quantitative evaluation of oil- and gas-saturated layers  
based on mud-logging data. Trudy SNIIGGIMS no. 30:119-126  
' 64 (MIRA 19:1)

SIGAL, I.B., inzh.

Using the dip method for finishing furniture parts with  
colored nitro lacquers. Der.prom. 10 no.10:22 0 '61. (MIRA 14:9)

1. Chernovitskaya mebel'naya fabrika.  
(Furniture painting)

KONONOVA, B.S.; SIGAL, L.D.

Shifts in the incidence of tuberculous meningitis in the Moldavian S.S.R. from 1953 to 1958. Zdravookhranenie 3 no.3:7-11 My-Je '60.  
(MIRA 13:7)

1. Iz Respublikanskogo protivotuberkuleznogo dispansera Moldavskoy SSR (glavnyy vrach L.D. Sigal).  
(MOLDAVIA--MENINGES--TUBERCULOSIS)

BURLACHENKO, M.A., kand. med. nauk; SIGAL, L.D.; KAUSHANSKIY, M.Z.;  
PEL'TIN, K.K.; KRAVETS, I.G.; ZDANOVICH, O.A.; ERMAN, I.D. (Kishinev);  
MIL'SHTEYN, P.V. (Bel'ts); ETLIS, S.S. (Bendery); MISHCHENKO, S.A.;  
ROYTIKH, R.M. (Tiraspol); VASSERMAN, Z.S. (Soroki)

Role of artificial pneumothorax in the compound treatment of  
pulmonary tuberculosis. Probl. tub. no 7:24-29 '63. (MIRA 18:1)

1. Iz Moldavskogo instituta tuberkuleza (direktor - kand. med.  
nauk M.A. Burlachenko).

BOYKOV, A.N.; SIGAL, L.M.

Use of appliances in work classes. Politekh.obuch. no.10:  
36-38 0 '59. (MIRA 13:2)

1. Srednyaya shkola No.69, Kaybyshev.  
(Carpentry--Study and teaching)

PAVLOVICH, M., SIGAL, M.

How to use the unified rates for freight haulage. Avt. transp. 42  
no. 9:35-37 S '64. (MIRA 17:11)

1. Ministerstvo avtotransporta i shosseynykh dorog RSFSR.

ACC NR: AP7003129

SOURCE CODE: UR/0126/66/022/004/0529/0537

AUTHOR: Deryugin, I. A. ; Sigal, M. A.

ORG: Kiev State University im. T. G. Shevchenko (Kiyevskiy gosuniversitet)

TITLE: Magnetization of fine-disperse particles of Fe-Co alloy

SOURCE: Fizika metallov i metallovedeniye, v. 22, no. 4, 1966, 529-537

TOPIC TAGS: metal powder, iron base alloy, cobalt, magnetization, magnetic anisotropy

ABSTRACT: The magnetic properties of elongated single-domain particles of Fe and Fe-Co are of interest to the applicability of these particles as the material of permanent magnets. In this connection the hysteresis loop, initial susceptibility and magnetization of elongated single-domain particles, as calculated on the basis of the Stoner-Wohlfarth model of coherent magnetization reversal (Stoner, E. C., Wohlfarth, E. P. Phil. Trans. Ro. Soc., 1948, 240, 599), are compared with experimental findings. An allowance is made for the distribution function with respect to anisotropy, determined by measurements of natural ferromagnetic resonance in single-domain powder of Fe-Co within the range of 400-40,000 mega-cps, since the Stoner-Wohlfarth model pertains to particles of a regular ellipsoidal shape whereas the

UDC: 538.24

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ACC NR: AP7005129

powders in question consist of elongated particles with short lateral protrusions. It is shown that despite the irregularity of the structure and shape of the Fe-Co particles considered, and the concomitant decrease in anisotropy the experimental and theoretical findings on the shape of the hysteresis loop, initial susceptibility and magnetization essentially are in satisfactory agreement. This is also demonstrated by a comparison of the experimental and theoretical curves of the initial magnetization and hysteresis loop of Fe-Co powders consisting of a mixture of single- and multiple-domain particles. Orig. art. has: 6 figures, 17 formulas, 1 table.

SUB CODE: <sup>11</sup>~~2~~ 20/ SUBM DATE: 07Oct 65/ ORIG REF: 006/ OTH REF: 014

Card 2/2

20670

24.7800 (1147,1385,1155)

S/057/81/031/001/015/017  
B104/B204

AUTHORS: Deryugin, I. A. and Sigal, M. A.

TITLE: Dispersion of magnetic permeability and the dielectric constant of artificial dielectrics within the frequency range of 500-35,000 Mc/sec

PERIODICAL: Zhurnal tekhnicheskoy fiziki, v. 31, no. 1, 1961, 100-108

TEXT: In the introduction, the results of theoretical and experimental investigations of artificial dielectrics in the super-high frequency range are discussed. Special attention is devoted to a paper by L. Levin (Ref. 4), in which the interaction between electromagnetic waves and a periodic lattice of conducting particles was investigated. For the permeability and the dielectric constant of a semi-space filled with a cubic lattice of spherical particles, the author obtained the relations

$$\left. \begin{aligned} \mu &= \mu_1 \left[ 1 + \frac{3k}{\mu_p + 2\mu_1 - k} \right] \\ \epsilon &= \epsilon_1 \left[ 1 + \frac{3k}{\epsilon_p + 2\epsilon_1 - k} \right] \end{aligned} \right\} \quad (1)$$

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Dispersion of magnetic permeability...

S/057/61/031/001/015/017  
R104/B204

$$\left. \begin{aligned} \epsilon_p &= \epsilon_2 F(\theta), & \mu_p &= \mu_2 F(\theta), \\ \text{where } F(\theta) &= \frac{2(1g\theta - \theta)}{(\theta^2 - 1)1g\theta + \theta}, & \theta &= \frac{2\pi a}{\lambda} \sqrt{\epsilon_2 \mu_2} \end{aligned} \right\} \quad (2)$$

Here  $\epsilon_p$  and  $\mu_p$  are the effective permeabilities and dielectric constants of the particles,  $\epsilon_2$  and  $\mu_2$  are the corresponding values of the substance,  $a$  is the particle radius,  $\lambda$  the wavelength in the free space, and  $k$  the volume concentration of the conducting particles. In the present paper the authors compare experimental data with the curves drawn according to formulas (1). When drawing these curves, the calculation of the function  $F(\theta)$  was very difficult. For  $|\theta| < 1$ ,  $F(\theta)$  may be calculated by means of the expansion in series

$$F(\theta) = 1 + \frac{\theta^2}{10} + \frac{9\theta^4}{700} + \dots \quad (4). \quad \text{Within the range of } 1 < |\theta| < 10, \text{ the}$$

function  $F(\theta)$  is determined by means of the curves shown in Fig. 1. In the range  $|\theta| > 10$ :  $F(\theta) = 2/j\theta$  (5). The authors studied the dielectrics produced from copper powder embedded in paraffin. The first powder

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Dispersion of magnetic permeability ...

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B104/B204

pattern was obtained by mechanical crumbling and separation. The grain size of the powder fraction thus obtained was  $a \approx 10^{-4}$  cm. The second powder pattern was obtained from colloidal copper, which had been produced electrolytically. Permeability and dielectric constant of the artificial dielectrics within the frequency range investigated were measured by means of waveguides filled with these dielectrics, whose input resistances were measured. The well-known formulas for determining permeability and dielectric constants from the input resistances of the waveguides were derived. For calculating a theoretical curve, approximate

formula  $\epsilon = \epsilon_1 \left(1 + \frac{3k}{1-k}\right)$  (2) is given. Fig. 3 shows a comparison

between the theoretical dependence of the dielectric constant on the volume concentration of the copper powder and the experimental results of the two types of dielectrics. It is shown that the dielectric constant of the dielectrics produced from the first-named powder pattern increases much more quickly with growing concentration than that produced from the second powder pattern. However, also the latter dielectrics still show a greater increase of the dielectric constant with growing copper concentration

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Dispersion of magnetic permeability ...

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B104/B204

than the theoretical curve. The deviations are explained by the fact that the demand that the copper particles be spherical, is not fulfilled. As further results, the dependence of the relative polarizability of particles  $P = \alpha/\alpha_0$ , where  $\alpha$  is the measured polarizability and  $\alpha_0$  that of spherical particles, upon the volume concentration at 9,250 Mc, is shown. Similar results are given concerning the dependence of permeability on the concentration (Fig. 5), of the loss angle upon concentration (Fig. 6), and concerning the dispersion of permeability and the dielectric constant (Fig. 7), as well as concerning the frequency dependence of the loss angle (Fig. 8). From these results the authors gather that at low concentrations of the copper powder, the function  $\epsilon = f(k)$  satisfies the Clausius-Mossotti equation. At higher concentrations, the shape of the particles makes itself noticeable. There is a frequency range in which no dispersion of  $\epsilon$  and  $\mu$  occurs. This corresponds to a total penetration of waves through the particles. In this range, permeability is equal to unity. There are 9 figures and 11 references: 4 Soviet-bloc and 6 non-Soviet-bloc.

Card 4/1:

Dispersion of magnetic permeability ...

20670

S/057/61/031/001/015/017  
B104/B204

ASSOCIATION: Kiyevskiy gosudarstvennyy universitet im. T. G. Shevchenko  
(Kiyev State University imeni T. G. Shevchenko)

SUBMITTED: March 5, 1960

Legend to Fig. 1:  
 $F(\theta)$  (curve 1) and  $\arg F(\theta)$   
as a function of  $\theta$ , calculated  
according to formula (2).

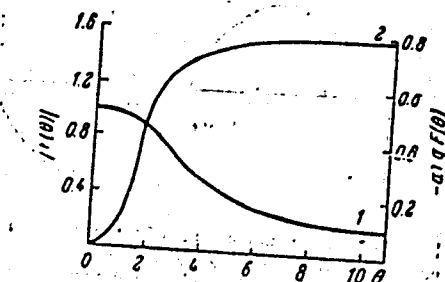


Рис. 1. Зависимости  $|F(\theta)|$  (1) и  $\arg F(\theta)$  (2)

Card 5/ 11

DERYUGIN, I.A.; SIGAL, M.A.

Natural ferromagnetic resonance in fields of form anisotropy  
for one-domain Fe, Ni, Co particles. Fiz.tver.tela 4 no.2:494-  
500 F '62. (MIRA 15:2)

1. Kiyevskiy gosudarstvennyy universitet imeni T.G.Shevchenko.  
(Ferromagnetic resonance)

Sigal, M.B.  
SIGAL, M.B., kand. tekhn. nauk; MALAFEEV, L.A., inzh.

New method for checking spinnerets. Tekst. prom. 18 no.1:16-17 Ja '58.  
(Textile machinery--Testing) (MIRA 11:2)

SIGAL, M.B.; KOZIOROVA, T.N.

"Polyamides" [translated from the German] by G.Hopff, A.Müller,  
F.Wenger. Reviewed by M.B.Sigal, T.N.Koziorova. Khim.volok.  
no.1:62-63 '59. (MIRA 12:8)  
(Amides) (Textile fibers, Synthetic)  
(Hopff, G.) (Müller, A.) (Wenger, F.)

SIGAL, M.B.; KOZIOROVA, T.N.; LIMANOVSKIY, A.Ye.; PENSKAYA, E.K.

Properties and processing of teflon. Khim. volok. no.2:3-11  
'59. (MIRA 12:9)

1.Vsesoyuznyy nauchno-issledovatel'skiy institut institut iskusstvenno-  
go volokna.  
(Ethylene) (Textile fibers, Synthetic)

SIGAL, M.B.; KUDRYAVTSEV, G.I.; KOZIOROVA. T.N.

Method and equipment for determining the fiber-forming properties  
of high-melting polymers. Khim.volok. no.5:29-30 '59.  
(MIRA 13:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo  
volokna (VNIIV).  
(Polymers) (Textile fibers, Synthetic)

S/183/62/000/004/001/007  
B117/B144

AUTHORS: Sigal, M. B., Varshavskiy, V. Ya., Koziorova, T. N.  
TITLE: Determination of fiber-forming properties of new polymers

PERIODICAL: Khimicheskiye volokna, no. 4, 1962, 21 - 24  
TEXT: The author's method and apparatus described earlier (Khim. volokna, no. 5, 29 (1959)) are superior to those more recently reported (Man-Made Text., 38, no. 439, 71 (1961)) in that they need a minimum of only 1 g polymer as against 25 g. The improved device allowed considerable variations in the conditions for fiber formation from the melt and stretching, these processes being conducted either continuously or individually. The reliability and reproducibility of the method was checked with a standard polycaprolactam fiber. The fiber-forming properties of some new polymers produced in the VNIIV, Institut elementoorganicheskikh soyedineniy AN SSSR (Institute of Elemental Organic Compounds AS USSR) and other institutions were determined. The best of these, yielding strong, elastic, and stretchable fibers, were: polyamide on the basis of n-amino-ethyl-phenyl acetic acid, copolymer of octamethylene diamine salt and hexahydro terephthalic acid (72 %) containing 28 % caprolactam, a polyamide on the basis of non-

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Card

SIGAL, M.B.; KOZIOROVA, T.N.

Preparation of monofilaments from polytetrafluoroethylene  
pastes. Khim.volok. no.5:25-27 '62. (MIRA 15:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut  
iskusstvennogo volokna.  
(Textile fibers, Synthetic)  
(Ethylene polymers)

VARSHAVSKIY, V.Ya.; SIGAL, M.B.

Polyformaldehyde, a new raw material for synthetic fibers.  
Khim.volok. no.1:5-9 '63. (MIRA 16:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstven-  
nogo volokna.  
(Formaldehyde) (Textile fibers, Synthetic)

SIGAL, Mark Borisovich; SEREBRYAKOVA, Z.G., *in* *ibid.*, 1964, 181,  
N.N., red.

[Production of polyamide fibers] Proizvodstvo poliamidnykh  
volokon. Moskva, Vysshaya shkola, 1964. 91 p.  
(MIRA 18:3)

SIGAL, M.B.; SHABLYGIN, M.V.; VARSHAVSKIY, V.Ya.

Use of the infrared spectroscopy method for studying "polifen"  
fibers. Khim. volok. no.2:25-27 '65. (MIRA 18:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo  
volokna.

RYAUZOV A.N., GRUZDEV, V.A.; KOSTROV, Yu.A.; SIGAL, M.B.;  
GERSHMAN B.G.; ~~rel.~~ VIATKINA, N.V.; ~~rel.~~

[Technology of the manufacture of synthetic fibers] Tekhnologiya proizvodstva khimicheskikh volokon. Moskva, Khimya, 1965. 516 p.  
(MIRA 18:8)

L 20920-66 EMT(m)/EM(j)/T WA/RM

ACCESSION NR: AP5019630

UR/0183/65/000/004/0008/0009  
678.742

AUTHOR: Sigal, M. B.; Koziorova, T. N.

TITLE: Preparation of polyphen fiber from polytetrafluoroethylene dispersions

SOURCE: Khimicheskiy volokna, no. 4, 1965, 8-9

TOPIC TAGS: polytetrafluoroethylene, synthetic fiber/ polyphen synthetic fiber

ABSTRACT: The characteristic properties of polytetrafluoroethylene (insolubility, infusibility, and absence of flow at temperatures above the melting point of the crystalline phase of the polymer) exclude the use of ordinary methods in the preparation of fibers from this substance. The method employed in this work consisted in preparing the fiber from an aqueous colloidal dispersion of polytetrafluoroethylene (PTFE). A fiber filled with PTFE is formed from the auxiliary fiber-forming polymer polyvinyl alcohol, then subjected to a heat treatment in order to decompose the polyvinyl alcohol and to transform the PTFE filler into polyphen fiber via the coagulation of its particles. Various processes for forming the polyphen fiber by the wet method were tested, and a horizontal process was found to be the simplest and

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L 20980-66

ACCESSION NR: AP5019630

most suitable from the technological standpoint. The parameters of the process were studied: composition and temperature of the precipitation bath, forming rate, length of thread in the bath, spinneret drawing, etc. After a chemical treatment, washing, and drying, the fiber is subjected to the action of heat above the melting point of the crystalline phase (327°C), and threads of polyphen are thus formed. Orig. art. has: 1 figure.

ASSOCIATION: VNIIV

SUBMITTED: 17Jun64

NO REF SOV: 004

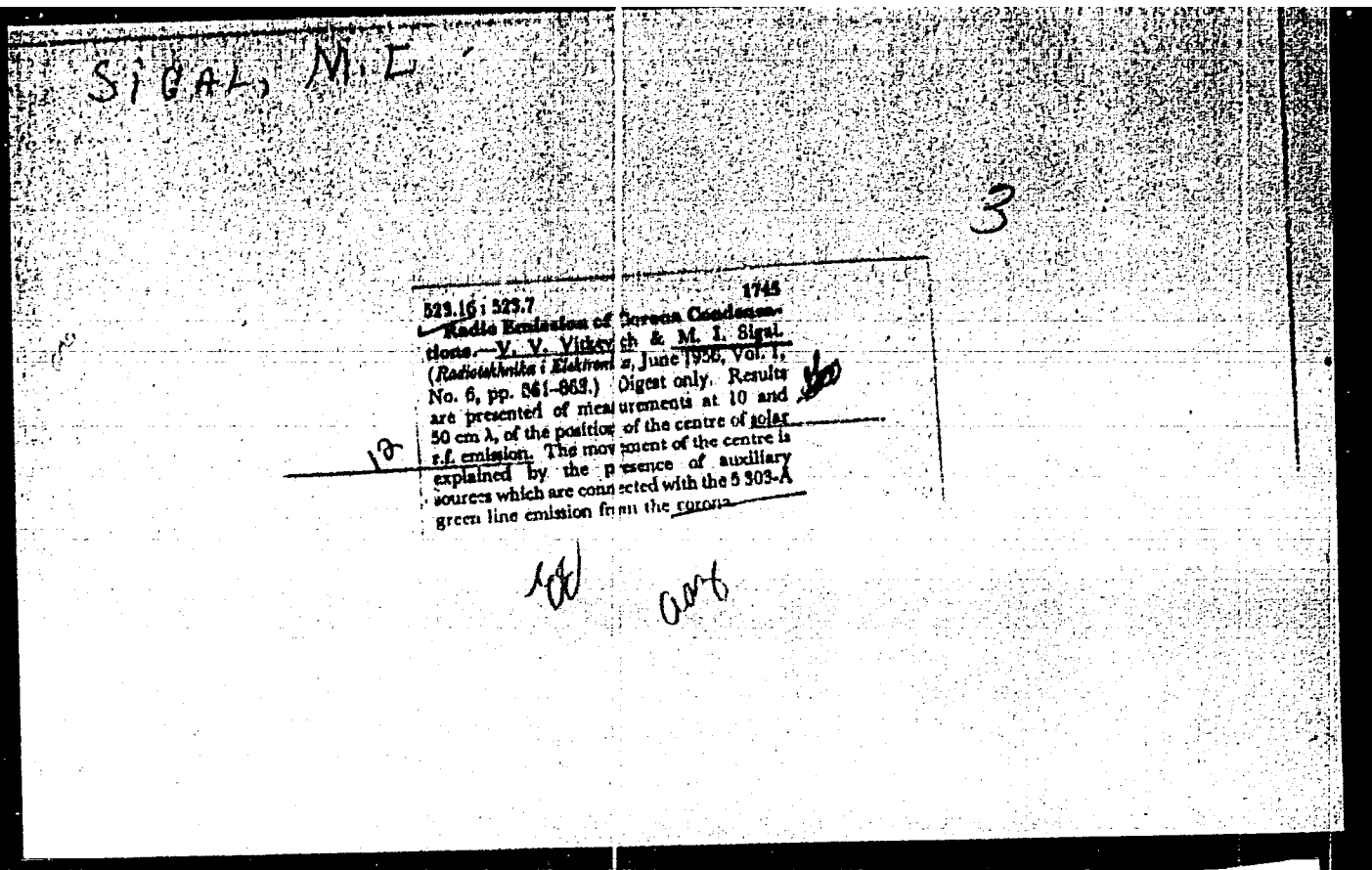
INCL: 00

SUB CODE: MT, IE

OTHER: 002

Card 2/2

*mgs*



33-5-5/12

SICAF, M.I.  
AUTHOR: Vitkevich, V. V. and Sigal, M. I.

TITLE: On the Radio Emission of **Coronal Condensations**.  
(O Radioizluchenii Koronal'nykh Kondensatsiy)

PERIODICAL: Astronomicheskii Zhurnal, 1957, Vol.34, No.5,  
pp. 716-723 (USSR).

ABSTRACT: It is known that the solar radio emission in the decimeter and meter region originates in the solar corona. Therefore, by studying this radiation it is possible to obtain information about the processes in these inner regions of the sun. The solar radio emission in the decimeter region can be represented as consisting of the following components: 1. radio emission of a "quiet sun", due to thermal radiation of the corona; 2. a slowly varying (with time) component connected with long lived formations such as spots, coronal disturbances etc.; 3. radio emission flares connected with fast solar processes e.g. chromospheric flares. In the present work some results of studies on the second component are reported. Observations were carried out at 50 cm. using a two antenna radiointerferometer. A modulated radiometer set up differentially was used as a receiver. The base of the interferometer was disposed along the west east direction. The dimensions of

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-- these are by

On the Radio Emission of Coronal Condensations.

33-5-5/12

SUBMITTED: February, 9, 1957.

ASSOCIATION: Physical Institute imeni P. N. Lebedev, Academy of  
Sciences of the USSR. (Fizicheskiy Institut im. P. N.  
Lebedeva, Akademii Nauk SSSR.)

AVAILABLE: Library of Congress.

Card 3/3

VYLEGZHANIN, N.I., dotsent; ZMELENKOVA, N.P.; MESSINOVA, O.V.; KLUCHAREVA,  
S.G.; KHAYKINSON, N.M.; KHARITONOV, R.K.; SMOAL, R.S., dotsent;  
GOL'DSHEYN, D.Ye., prof.; LYUBINA, N.I. dotsent; SILICH, I.L.,  
dotsent; RATNER, Yu.A., prof.; DANILOV, I.V., prof.; MUKHAMED'-  
YAROVA, A.K.;

Conference of physicians of the city of Kazan concerning the  
results of the Eighth International Cancer Research Congress.  
Kaz. med. zhur. no.6:72-90 '62. (MIRA 17:5)

*a, n* L 9794-66  
ACC NR: AP5028540

SOURCE CODE: UR/0286/65/000/020/0140/0141

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TITLE: Device for filling jars with a product. Class 81, No. 175868

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ABSTRACT: This Author Certificate presents a device for filling jars, containing a loading bin, a product-metering device with pistons, and a mechanism for supplying empty jars and removing filled jars. To use it for packaging of sauerkraut, the metering device consists of a cylindrical body which rotates around a vertical axis and which has slots with metering cylinders located uniformly around its perimeter. These metering cylinders consist of two half-cylinders, one of which is pressed into the slot while the other is connected to the carriage with the help of a spring-loaded lever with a roller at its free end. This roller interacts with a regulating template to move the half-cylinder into the slots. A curved cut-off knife is also provided. To separate the sauerkraut from the brine and to feed it to the metering cylinders, a second feature of the device provides a scraping conveyor located under the bin with a comb-like unloader, an inclined belt conveyor with an underpan for

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collecting the brine, and paddle-type loaders. The bin is equipped with a vibrator. To meter brine into the jars, a third feature provides a well-known rotary type liquid loader. To provide constant product delivery by the paddle loader, a spring-loaded diaphragm is located in the loader exit pipe. This diaphragm is connected to a rod which acts through a rheostat on the driving mechanism changing the conveyor and paddle feeder speeds.

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